FUGRO CONSULTANTS, INC.



8613 Cross Park Drive Austin, Texas 78754 Phone: 512-977-1800 Fax: 512-973-9966

Williamson County 350 Discovery Blvd. Suite # 207 Cedar Park, Texas 78613 Proposal No. 04.30102026 May 20, 2010

irodgers@wilco.org

Attention: Mr. Jim Rodgers

Proposal for Construction Materials Testing and Inspection Services
Southwest Regional Park - Splashpad
Williamson, Texas

Introduction

We are pleased to submit this proposal for providing on-site construction materials testing services for the above referenced project. In preparing this proposal, we have received project plans and specifications, issue date 1/18/10. In addition, Fugro provided geotechnical engineering services on this project (Fugro Report No. 04.30091072, dated 12/9/09.

In general, the project includes construction of a splash pad feature at the existing Southwest Regional Park, including two Reunion Pavilions, two Birthday Pavilions, a Restroom Facility, a pedestrian bridge, stone retaining walls, various walkways and plazas, and asphalt parking lot / drives. The project is located northwest of the intersection of Perry Mayfield Blvd. and Porho Drive, in Williamson County, Texas. In this proposal we present a scope of services, a fee estimate and unit price schedules.

Scope of Services

We anticipate that our scope of services will consist of:

- Earthwork Testing;
- Drilled Pier Observation;
- Concrete Reinforcing Steel Observation;
- Concrete Testing;
- Structural Masonry Testing;
- Welding and Bolting Inspection; and

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Asphalt Testing.

For placement and compaction of structural fill, site fill, utility backfill, retaining wall backfill, natural subgrade, and pavement base material, we will provide a soil technician when requested to perform required field density tests to monitor the contractor's compliance with specifications. Laboratory tests will consist of Atterberg limits, gradation analyses, and moisture density relationships. We have assumed that the pavement base supplier will provide certified laboratory test reports, and have not included this cost in our estimate.

For drilled pier or foundation construction, our technician will verify that the piers or footings have been installed to the required penetration of the proper bearing stratum. He will also verify that the excavation(s) has been properly cleaned, that piers are within plumbness requirements, and that casing is used, if required. Because boulder fill is anticipated to depths of 7 to 19+ feet, we anticipate that drilling progress will be slow, especially at the start of construction, and with an average of about 4 piers completed per day.

When requested, we will observe the concrete reinforcement prior to structural concrete placements. Bar size, spacing, splicing, cleanliness, and cover will be examined for compliance with the approved structural drawings.

When requested, our duties for cast-in-place concrete monitoring will be slump testing, air content testing, molding compression test cylinders, and concrete compression testing. Concrete will be observed for slump at the point of placement, and one set of concrete cylinders will be cast at the specified frequency. We have budgeted testing for all structural concrete, including building foundations and slabs, and retaining wall footings. We have budgeted only partial, or intermittent testing for site concrete such as sidewalks, plazas, flatwork, curb and gutter, rip rap, etc.

When requested for structural steel assemblies, a Certified Welding Inspector (CWI) will perform visual observation of all welded connections. Bolted connections will be checked for proper torque. All critical full-penetration welds can be tested by ultrasonic techniques if necessary. The construction contractor(s) will provide manlifts, scaffolding, or other suitable access to all welds requiring inspection. When requested, we will sample bearing grout for compressive strength testing.



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When requested, we will observe concrete masonry unit wall construction to verify size and location of reinforcement and proper placement of grout. Mortar cubes and grout prisms will be cast to verify compliance with strength requirements. For boulder retaining walls, when requested, we will perform pull-tests on installed anchors, up to 1 ½" diameter. We will also sample and test anchor grout for compressive strength if requested.

When requested, our technicians will also perform laboratory testing on the hot mix asphaltic concrete (HMAC). We will cut cores for determining field density and in-place thickness. Laboratory testing will include molding of test specimens, laboratory densities, voids in mineral aggregate, determination of maximum theoretical density, asphalt content, and gradation.

Our field technician(s) will immediately report results of field observations directly to the on-site job superintendent and owner's representative. We will assist the superintendent in identification and correction of any observed non-compliances with project specifications. In no case will our technician direct the contractor's operations, waive specifications, or make final acceptance of the contractor's work.

The scope of services proposed herein does not include inspection of any items at off-site suppliers and fabrication plants; it is assumed that suppliers and fabrication plants employed by the contractor have their own QA/QC program to satisfy the project requirements.

Terms and Conditions

Our general conditions for materials engineering and technical services are presented on Schedule 40.01. Construction materials testing fees are included on Fee Schedule CMT-2009. Both schedules are attached. The project will be billed monthly on the basis of this fee schedule.

Materials testing services are for quality control purposes only. In no way are our personnel responsible for the job site safety of others, nor do they have stop-work authority. However, our personnel will conduct their work in a safe, workman-like manner, and will observe work-site safety requirements.

The following statement is required by Fugro's Insurance Company. Fugro's scope of work does not include the investigation, detection, or design related to the presence of any Biological Pollutants. The term "Biological Pollutants" includes, but is not limited to, mold, fungi, spores, bacteria, and viruses, and the byproducts of any such biological organisms.



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Proposed Budget

Testing costs will vary depending on the construction schedule, project sequencing, overlapping of work, weather, and other factors. Our services will be provided on a call-out basis and will be billed in accordance with the attached fee schedule. For budgeting purposes, we estimate that our fees will be approximately \$30,985.50, as detailed in the attached breakdown.

This cost estimate is based on the acceptance of our terms and conditions without modification, and the use of this proposal as our sole agreement.

* *



CLIENT

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To indicate acceptance of our proposal, please have the signature block below signed by a duly authorized person in the spaces provided and return the attached copy to us for our files.

We appreciate the opportunity to submit this proposal and look forward to working with you on this project. If you have any questions, please call.

FUGRO CONSULTANTS, INC. TBPE Firm Registration No. 299

John S. Landwermeyer, P.E. Senior Project Manager

H:\CMT\PROPS\2010\04.30102026 Southwest Regional Park\p04.30102026.doc Attachments

~ L. T. T. T.	
Authorizing Signature	
Name & Title	
Company	
Company	
Date	



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Document Distribution

Please indicate the addresses that you wish to have test reports distributed to.

Owner:	Tele:
Attn:	E-Mail:
Attn:	E-Mail:
Contractor:	Tele:
Attn:	E-Mail:
Attn:	E-Mail:
Architect:	Tele:
Attn:	E-Mail:
Attn:	E-Mail:
Engineer:	Tele:
Attn:	E-Mail:
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Other:	Tele:
Attn:	E-Mail:
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GENERAL CONDITIONS FOR TECHNICAL SERVICES

1. Parties to This Agreement

CLIENT as used herein is the entity who authorizes performance of services by Fugro Consultants, Inc. (FUGRO) under the conditions stated herein. FUGRO as used herein includes, Fugro Consultants, Inc., its employees and officers, and its subcontractors and sub-consultants (including affiliated corporations).

On-site Responsibilities and Risks

- 2.1 Right-of-Entry. Unless otherwise agreed, CLIENT will furnish unfettered rights-of-entry and obtain permits as required for FUGRO to perform the fieldwork.
- 2.2 Damage to Property. FUGRO will take reasonable precautions to reduce damage to land and other property caused by FUGRO's operations. However, CLIENT understands that damage may occur and FUGRO's fee does not include the cost of repairing such damage. If CLIENT desires FUGRO to repair and/or pay for damages, FUGRO will undertake the repairs and add the pre-agreed cost to FUGRO's fee.
- 2.3 Toxic and Hazardous Materials. CLIENT will provide FUGRO with all information within CLIENT's possession or knowledge as to the potential occurrence of toxic or hazardous materials, or Biological Pollutants (as defined in 9, below) at the site being investigated. If unanticipated toxic or hazardous materials, or biological pollutants are encountered, FUGRO reserves the right to demobilize FUGRO's field operations at CLIENT's expense. Remobilization will proceed following consultation with FUGRO's safety coordinator and CLIENT's acceptance of proposed safety measures and fee adjustments.
- 2.4 Utilities and Pipelines. While performing FUGRO's fieldwork, FUGRO will take reasonable precautions to avoid damage to subterranean and subaqueous structures, pipelines, and utilities. CLIENT agrees to defend, indemnify, and hold FUGRO harmless for any damages to such structures, pipelines, and utilities that are not called to FUGRO's attention and/or correctly shown on plans furnished to FUGRO.
- 2.5 Site Safety. FUGRO is not responsible for the job site safety of others, nor does FUGRO have stop-work authority over work by others. However, FUGRO will conduct its work in a safe, workman-like manner, and will observe the work-site safety requirements of CLIENT that have been communicated to FUGRO in writing.

Standard of Care

- 3.1 FUGRO will perform its services consistent with that level of care and skill ordinarily exercised by members of the profession currently practicing under similar conditions in the same location.
- 3.2 CLIENT acknowledges that conditions may vary from those encountered at the location where borings, surveys, or explorations are made and that FUGRO's data, interpretations, and recommendations are based solely on the information available to FUGRO, and FUGRO is not responsible for the interpretation by others of the information developed.

4. Limitation of Remedies

To the greatest extent permitted by law, CLIENT's sole remedy against FUGRO for claims and liabilities in any way arising out of or directly or indirectly related to FUGRO's work for CLIENT will not exceed an aggregate limit of \$50,000 or the amount of FUGRO's fee, whichever is greater, regardless of the legal theory under which remedy is sought, whether based on negligence (whether sole or concurrent, active or passive), breach of warranty, breach of contract, strict liability or otherwise. In the event CLIENT does not wish to limit FUGRO's remedy to this sum, and if CLIENT requests in writing prior to acceptance of this Agreement, FUGRO agrees to negotiate a greater remedy amount in exchange for an increase in scope and fee appropriate to the project and remedy risks involved.

5. Invoices and Payment

At FUGRO's discretion, invoices will be submitted at the completion of task elements, or monthly for services rendered. Payment is due upon presentation of FUGRO's invoice and is past due thirty- (30) days from invoice date. CLIENT agrees to pay a financing charge of one percent (1%) per month (or the maximum rate allowable by law, whichever is less), on past due accounts, and agrees to pay attorney's fees or other costs incurred in collecting any definquent amount.

6. Data, Records, Work Product and Report(s), and Samples

Data, Records, Work Product and Report(s) are FUGRO's property. All pertinent records relating to FUGRO's services shall be retained for a minimum of two (2) years after completion of the work. CLIENT shall have access to the records at all reasonable times during said period. FUGRO will retain samples of soil and rock for a minimum of 30 days after submission of FUGRO's report unless CLIENT advises FUGRO otherwise. Upon CLIENT's written request, for an agreed charge FUGRO will store or deliver the samples in accordance with CLIENT's instructions.

7. Indemnification

FUGRO and CLIENT shall indemnify each other from any claims, damages, losses, and costs, including, but not limited to, reasonable attorney's fees and fitigation costs, to the proportionate extent caused by each party's own negligence, including the negligence of the indemnifying party, and its employees, affiliated corporations, officers, and sub-tier parties in connection with the project.

8. Consequential Damages

Notwithstanding any other provision of this Agreement, CLIENT and FUGRO waive and release any claim against the other for loss of revenue, profit or use of capital, loss of services, business interruption and/or delay, loss of product, production delays, losses resulting from failure to meet other contractual commitments or deadlines, downtime of facilities, or for any special, indirect, delay or consequential damages resulting from or arising out of this Agreement, or as a result of or in connection with the work, and whether based on negligence (whether sole or concurrent, active or passive), breach of warranty, breach of contract, strict liability or otherwise.

9. <u>Biological Pollutants</u>

FUGRO's scope of work does not include the investigation, detection, or design related to the presence of any Biological Pollutants. The term "Biological Pollutants" includes, but is not limited to, mold, fungi, spores, bacteria, and viruses, and the byproducts of any such biological organisms. CLIENT agrees that FUGRO will have no liability for any claim regarding bodily injury or property damage alleged, arising from, or caused directly or indirectly by the presence of or exposure to any Biological Pollutants. In addition, CLIENT will defend, indemnify, and hold harmless FUGRO from any third party claim for damages alleged to arise from or be caused by the presence of or exposure to any Biological Pollutants. If CLIENT requests in writing prior to acceptance of this Agreement, FUGRO will negotiate a greater limitation amount, and remove CLIENT's responsibilities, in exchange for an increase in fee to develop an expanded scope of work to provide biological pollutant protection.

Acceptance of Agreement

These GENERAL CONDITIONS have been established in large measure to allocate certain risks between CLIENT and FUGRO. FUGRO will not initiate service without formal agreement on the terms and conditions set forth in these GENERAL CONDITIONS. Acceptance or authorization to initiate services shall be considered by both parties to constitute formal acceptance of all terms and conditions of these GENERAL CONDITIONS. Furthermore, all preprinted terms and conditions on CLIENT's purchase order or purchase order acknowledgment forms are inapplicable to these GENERAL CONDITIONS and FUGRO's involvement in CLIENT's project.

Termination of Contract

CLIENT and FUGRO may terminate services at any time upon ten (10) days written notice. In the event of termination, CLIENT agrees to fully compensate FUGRO for services performed including reimbursable expenses to the termination date, as well as demobilization expenses. FUGRO will terminate services without waiving any claims or incurring any liability.



FEES FOR CONSTRUCTION MATERIALS TESTING SERVICES

1. Fio 1.:	· · · · · · · · · · · · · · · · · · ·	Regular Time ⁽¹⁾ \$43.00/hr	Overtime ⁽²⁾ \$ 53.00/hr
1.3	or equivalent) 3 Senior Supervising Technician (NICET	\$48.00/hr	\$ 58.00/hr
1.4	Level III, TxDOT Level II, or equivalent) 4 Certified Welding Inspector	\$85.00/hr \$72.00/hr	\$ 95.00/hr \$ 82.00/hr
2. Fid 2.7 2.2 2.3 2.4 2.5 2.6 2.7	Nuclear Density Tests (In addition to technical Torque Wrench Dye Penetrant & Magnetic Particle Supplies Ultrasonic Testing Equipment Asphalt Coring Equipment		\$ 0.585/mile \$ 13.00/test No Charge Cost + 15% \$ 20.00/hr \$ 20.00/hr \$ 20.00/hr + bit charge
2.8 2.9 2.1	2.8.1 3 inch-diameter Core2.8.2 4 inch-diameter Core2.8.3 6 inch-diameter Core(Other sizes quoted upon request)	ASTM E1155)	\$ 2.00/inch \$ 3.00/inch \$ 5.00/inch \$ 200.00/day \$ 15.00/ea
3.1 3.2 3.3 3.4 3.5 3.6 3.7 3.1 3.1 3.1 3.1	Atterberg Limits (TEX-104, 105, 106-É) Sieve Analysis - Soil (Nos. 4, 40, and 200, A Percent Passing No. 200 Sieve (TEX-111-E) Moisture Density Relationship (ASTM D 698 Moisture Density Relationship (ASTM D 155 Moisture Density Relationship (TEX-113-E) Moisture Density Relationship (TEX-114-E)) 7)	\$ 15.00/ea \$ 55.00/ea \$ 55.00/ea \$ 45.00/ea \$ 210.00/ea \$ 210.00/ea \$ 210.00/ea \$ 210.00/ea \$ 250.00/ea \$ 250.00/ea \$ 35.00/ea \$ 40.00/sample \$ 55.00/ea \$ 195.00/ea \$ 80.00/ea
4. L al	boratory Tests - Concrete and Cement Concrete Mix Design		Quoted on Request



	 4.2 Aggregate Sieve Analysis (ASTM C136) 4.3 Specific Gravity of Aggregate (ASTM C127, 128) 4.4 Absorption of Aggregate (ASTM C127, 128) 4.5 Unit Weight of Aggregate (ASTM C29) 4.6 Concrete Cylinder Compressive Strength (ASTM C39) 4.7 Beam Flexural Strength (ASTM C 78) 4.8 Mortar Cube Compressive Strength (ASTM C780) 4.9 Grout Specimen Compressive Strength (ASTM C1019) 4.10 Concrete Masonry Unit Strength (ASTM C140) 4.11 Concrete Masonry Unit Prism Strength (ASTM C1314) 4.12 Drilled Core Compressive Strength (ASTM C42) 	\$ 50.00/ea \$ 50.00/ea \$ 50.00/ea \$ 50.00/ea \$ 17.00/ea \$ 40.00/ea \$ 17.00/ea \$ 40.00/ea \$ 75.00/ea \$ 150.00/ea \$ 50.00/ea
5.	 Laboratory Testing - Asphalt and Roofing 5.1 Mix Design (Hveem or Marshall Method) 5.2 Molding Test Specimens, 3 per set (TEX-206-E), Bulk Density (TEX-207-E), and Stability (TEX-208-E)) 5.3 Determine Maximum Theoretical Density (TEX-227-E) 	Quoted on Request \$ 110.00/set \$ 60.00/ea
	5.4 Stripping Test5.5 Asphalt Content (TEX-236-E with correction) and Gradation (TEX-200-F)	\$ 75.00/ea \$ 235.00/ea \$ 200.00/ea \$ 40.00/ea \$ 50.00/ea \$ 25.00/ea \$ 40.00/ea
6.	Laboratory Testing - Structural Steel Weld Procedure and Welder Qualification Testing Rates	Quoted on Request
7.	7.3 Reproduction	faxing, hard-copy
8.	8.2 Project Manager8.3 Project Engineer	\$ 145.00/hr \$ 135.00/hr \$105.00/hr \$ 125.00/hr
9.	Outside Services	Cost + 15%

Notes: (1) Minimum call-out charge for CMT technician and equipment or sample pick-up is 2 hours.

Minimum call-out charge for CWI technician is 4 hours. Charges are accrued portal to portal.

(2) Overtime rates are applicable to time worked in excess of 8 hours per day, Monday through Friday; hours worked before 7:00 am and after 6:00 pm; and all hours worked on Saturdays, Sundays, and holidays.



CONSTRUCTION MATERIALS TESTING FEE ESTIMATE SOUTHWEST REGIONAL PARK WILLIAMSON COUNTY, TEXAS

Description	Test Method	Qly	Unit Price	Extension	Subtotal
Earthwork					
Field Density Tests	TEX 115E, Part I	100 ea	S13.00	\$1,300.00	
Technician	(LX) IOL, I GET	80 hr	S43.00	\$3,440.00	
Trip Charge		20 ea	\$40.00	\$800.00	\$5,540.00
Laboratory Testing for Soil		. 20 66	240.00	00.0000	33,340.00
Proctor Density	TEX 114E	5 ea	\$210.00	\$1,050.00	
Atterberg Limits	TEX 104, 105, 106E	5 ea	\$55.00	\$275.00	
Sieve Analysis	TEX 110E, 111E	5 ea	\$55.00	\$275.00 \$275.00	\$1,600.00
Drilled Piers	1 to // 1 to lar, 1 1 to	3 66	00.00	0270.00	31,000.00
Concrete Cylinders	ASTM C31, C39	40 ea	\$17.00	\$680.00	
Sr. Technician	MOTH 031, 033	80 hr	\$48.00	S3,840.00	
Overtime		24 hr	\$58.00	\$1,392.00	
Trip Charge		12 ea	\$40.00	\$480.00	\$6,392.00
Reinforcing Steel Inspections		12 60	540.00	3400.00	00,002.00
Sr. Technician		20 hr	\$48.00	\$960.00	
Trip Charge		4 ea	\$40.00 \$40.00	\$160.00	\$1,120.00
Concrete Placement - Structural		4 60	540.00	3100.00	31,120.00
Concrete Cylinders	ASTM C31, C39	60 ea	\$17.00	\$1,020.00	
Air Content Tests	ASTM C37, C39 ASTM C173, C231	4 ea	\$17.00	\$60.00	
Technician	M3 11/4 G 173, G231	60 hr	\$43.00 \$43.00	\$2,580.00	
		20 ea	540.00	\$800.00	\$4,460.00
Trip Charge Structural Masonry		20 ea	340,00	5000.00	04,400.00
CMU Mortar Cubes	ASTM C780	24 ea	\$17.00	\$408.00	
	ASTM C780 ASTM C1019	24 ea 16 ea	\$40.00	\$640.00	
CMU Grout Specimens		10 ea		\$204.00	
Anchor Non Shrink Grout Cubes	ASTM C140		\$17.00	\$204.00 \$0.00	
Masonry Units	ASTM C140	0 ea	\$75.00		
Masonry Prisms	ASTM C1314	0 ea	\$150.00	00.00	
Technician		42 hr	\$43.00	\$1,806.00	63 649 00
Trip Charge		14 ea	\$40.00	\$560.00	\$3,618.00
Welding Inspection	AOTALO700	0	C+7.00	C436 00	
Bearing Non Shrink Grout Cubes	ASTM C780	8 ea	\$17.00	\$136.00	
Certified Welding Inspector		12 hr	\$65.00	\$780,00	CO 00C 00
Trìp Charge		48 ea	\$40.00	\$1,920.00	\$2,836.00
Hot-Mix Asphaltic Concrete		0	C 4 D D O	6304.00	
Technician		8 hr	\$48.00	\$384.00	0404.00
Trip Charge		2 ea	\$40.00	\$80.00	\$464.00
Laboratory Testing for Asphalt			0440.00	6440.00	
Bulk Density/VMA	TEX 207F	4 set	\$110.00	\$440.00	
AC Content/Grad, w/ Corr Factors	TEX 236F, 200F	4 ea	\$235.00	\$940.00	
Max Theoretical Density	TEX 227F	4 ea	\$60.00	S240.00	
Asphalt Coring Equipment		4 hr	\$20.00	\$80.00	0 + 000 00
Specific Gravity of Asphalt core	TEX 207F	4 ea	\$40.00	\$160.00	\$1,860.00
Project Management			***		
Project Manager, P.E.		12 hr	\$135.00	\$1,620.00	
Report Production		Billed at 5%	of total fee	\$1,475.50	\$3,095.50
	Total Estimated Project Cost				\$30,985.50

Total Estimated Project Cost